



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/683,627

10/10/2003

Wojciech Kurek

33692.03.1358

1829

23418 7590 05/19/2009  
VEDDER PRICE P.C.  
222 N. LASALLE STREET  
CHICAGO, IL 60601

EXAMINER

MILORD, MARCEAU

ART UNIT

PAPER NUMBER

2618

MAIL DATE

DELIVERY MODE

05/19/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                     |  |
|------------------------------|--------------------------------------|-------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/683,627 | <b>Applicant(s)</b><br>KUREK ET AL. |  |
|                              | <b>Examiner</b><br>Marceau Milord    | <b>Art Unit</b><br>2618             |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-16 and 18-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-8,12,13,18-21,24 and 25 is/are allowed.
- 6) ☒ Claim(s) 1-4,9-11,14-16,22 and 23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                        |                                                                   |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____                                                            | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-4, 9-11, 14-16, 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beasley et al (US Patent No 7016325 B2) in view of Hagting et al (US Patent No 6236860 B1).

Regarding claims 1-2, Beasley et al discloses a communication circuit operative to update an active link set list in a wireless communication system (figs. 2-3, figs. 8-9; col. 8, line 41-col. 9, line 14) comprising: a circuitry operative to receive an active link set update message (step 208 of fig. 7) and in response (col. 9, lines 48-67, col. 11, lines 13-34) to create a candidate list of reference links based on the active link set list and the received active link set update message (col. 12, lines 8-52; col. 11, lines 36-67; col. 13, lines 20-66; col. 14, lines 8-62).

However, Beasley et al does not specifically disclose the features of an asynchronous wireless communication system that employs reference links for synchronizing with a base station.

On the other hand, Hagting et al, from the same field of endeavor, discloses the features of an asynchronous wireless communication system that employs reference links for synchronizing with a base station (fig. 1, figs. 4-6; col. 8, lines 41-67; col. 9, lines 1-51; col. 9, line 58-col. 10, line 57) .

Hagting et al discloses a method for improving handover of a call or roaming in an asynchronously operating radio environment. Hagting et al shows in figure 4a, a radio communication unit that comprises a timing reference which is synchronized or locked to the radio access unit. Furthermore, the radio communication unit has to perform an inter-cell handover of the call from the first radio access unit to the second radio access unit (figs. 4a-4c; col. 9, line 58-col. 10, line 57; col. 4, line 43-col. 5, line 6). In addition, asynchronous radio links can be detected by using a scan window. The timing reference of a radio communication unit can be adjusted to the common system timing retrieved via the SYNC word. Synchronization should be performed with respect to the strongest radio access unit (figs. 5-6, fig. 1; col. 8, lines 41-67; col. 9, lines 1-51). It is clearly stated that Hagting is directed to an asynchronous wireless communication system that employs reference links for synchronizing with a base station (see figs. 5-6; fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Hagting to the communication system of Beasley in order to provide a scanning method for initiating handover of a call in a radio communication system.

Regarding claim 3, Beasley et al as modified discloses a communication circuit operative to update an active link set list in a wireless communication system (figs. 2-3, figs. 8-9; col. 8, line 41-col. 9, line 14), wherein the candidate list of reference links includes at least the links to be retained in the active link set list as indicated in the active set update message if the active link set update message indicates the removal of a current reference link from the active link set list (figs. 8-9; fig. 11; col. 14, line 35-col. 15, line 13; col. 15, line 35-col. 16, line 31).

Regarding claim 4, Beasley et al as modified discloses a communication circuit operative to update an active link set list in a wireless communication system (figs. 2-3, figs. 8-9; col. 8, line 41-col. 9, line 14) wherein the candidate reference link determination circuitry is operative to update the active link set list (col. 12, lines 8-52; col. 11, lines 36-67) based on at least the received active link set update message (col. 12, lines 8-52; col. 11, lines 36-67; col. 13, lines 20-66; col. 14, lines 8-62).

Regarding claim 9, Beasley et al discloses a wireless device operative to update an active link set list in an asynchronous wireless communication system (figs. 2-3, figs. 8-9; col. 8, line 41-col. 9, line 14) comprising: a transceiver (MU 104) operative to receive an active link set update message (col. 5, lines 26-52; col. 9, line 48-col. 10, line 11); a determination circuitry (fig. 8), operatively coupled to the transceiver operative to receive an active link set update message (col. 12, lines 8-52; col. 11, lines 36-67; col. 13, lines 20-66; col. 14, lines 8-62); and a memory, operatively coupled to the determination circuitry, and operative to store the candidate list of reference links (col. 11, line 27-col. 12, line 52; col. 15, line 35-col. 16, line 31).

However, Beasley et al does not specifically disclose the features of an asynchronous wireless communication system that employs reference links for synchronizing with a base station.

On the other hand, Hagting et al, from the same field of endeavor, discloses the features of an asynchronous wireless communication system that employs reference links for synchronizing with a base station (fig. 1, figs. 4-6; col. 8, lines 41-67; col. 9, lines 1-51; col. 9, line 58-col. 10, line 57) .

Hagting et al discloses a method for improving handover of a call or roaming in an asynchronously operating radio environment. Hagting et al shows in figure 4a, a radio communication unit that comprises a timing reference which is synchronized or locked to the radio access unit. Furthermore, the radio communication unit has to perform an inter-cell handover of the call from the first radio access unit to the second radio access unit (figs. 4a-4c; col. 9, line 58-col. 10, line 57; col. 4, line 43-col. 5, line 6). In addition, asynchronous radio links can be detected by using a scan window. The timing reference of a radio communication unit can be adjusted to the common system timing retrieved via the SYNC word. Synchronization should be performed with respect to the strongest radio access unit (figs. 5-6, fig. 1; col. 8, lines 41-67; col. 9, lines 1-51). It is clearly stated that Hagting is directed to an asynchronous wireless communication system that employs reference links for synchronizing with a base station (see figs. 5-6; fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Hagting to the communication system of Beasley in order to provide a scanning method for initiating handover of a call in a radio communication system.

Regarding claim 10, Beasley et al discloses a wireless device operative to update an active link set list in an asynchronous wireless communication system (figs. 2-3, figs. 8-9; col. 8, line 41-col. 9, line 14), wherein the candidate reference link determination circuitry is operative to create the candidate list of reference links based on at least an indication in the received active link set update message to retain links from the active link set list, and wherein the memory contains the candidate list of reference links (col. 12, lines 8-52; col. 11, lines 36-67; col. 13, lines 20-66; col. 14, lines 8-62).

Regarding claim 11, Beasley et al discloses a wireless device operative to update an active link set list in an asynchronous wireless communication system (figs. 2-3, figs. 8-9; col. 8, line 41-col. 9, line 14), wherein the candidate list of reference links includes at least the links to be retained in the active link set list if the active link set update message indicates the removal of a current reference link from the active link set list (figs. 8-9; fig. 11; col. 14, line 35-col. 15, line 13; col. 15, line 35-col. 16, line 31).

Regarding claim 14, Beasley et al discloses a method for updating an active link set list in an asynchronous wireless communication system (figs. 2-3, figs. 8-9; col. 8, line 41-col. 9, line 14), the method comprising: receiving (system controller 208) an active link set message (col. 9, lines 48-67; col. 13, lines 20-47); and creating a candidate list of reference links based on the active link set update message and the active link set list (col. 12, lines 8-52; col. 11, lines 13-67; col. 13, lines 20-66; col. 14, lines 8-62).

However, Beasley et al does not specifically disclose the features of an asynchronous wireless communication system that employs reference links for synchronizing with a base station.

On the other hand, Hagting et al, from the same field of endeavor, discloses the features of an asynchronous wireless communication system that employs reference links for synchronizing with a base station (fig. 1, figs. 4-6; col. 8, lines 41-67; col. 9, lines 1-51; col. 9, line 58-col. 10, line 57) .

Hagting et al discloses a method for improving handover of a call or roaming in an asynchronously operating radio environment. Hagting et al shows in figure 4a, a radio communication unit that comprises a timing reference which is synchronized or locked to the radio access unit. Furthermore, the radio communication unit has to perform an inter-cell handover of the call from the first radio access unit to the second radio access unit (figs. 4a-4c; col. 9, line 58-col. 10, line 57; col. 4, line 43-col. 5, line 6). In addition, asynchronous radio links can be detected by using a scan window. The timing reference of a radio communication unit can be adjusted to the common system timing retrieved via the SYNC word. Synchronization should be performed with respect to the strongest radio access unit (figs. 5-6, fig. 1; col. 8, lines 41-67; col. 9, lines 1-51). It is clearly stated that Hagting is directed to an asynchronous wireless communication system that employs reference links for synchronizing with a base station (see figs. 5-6; fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Hagting to the communication system of Beasley in order to provide a scanning method for initiating handover of a call in a radio communication system.

Regarding claim 15, Beasley et al discloses a method for updating an active link set list in an asynchronous wireless communication system (figs. 2-3, figs. 8-9; col. 8, line 41-col. 9, line 14),

wherein creating the candidate list of reference links further includes creating a list of links to be retained from the active link set list (col. 11, lines 13-34; col. 12, lines 33-52; col. 14, lines 8-40).

Regarding claim 16, Beasley et al discloses a method for updating an active link set list in an asynchronous wireless communication system (figs. 2-3, figs. 8-9; col. 8, line 41-col. 9, line 14), further includes creating a list of links to be retained from the active link set list (col. 11, lines 13-34; col. 14, lines 8-40; col. 15, lines 38-67).

Regarding claims 22-23, Beasley et al discloses a memory comprising instructions executable by one or more processing devices (figs. 2-3, figs. 8-9; col. 8, line 41-col. 9, line 14) that cause the one or more processing devices to: receive an active link set message (col. 3, lines 1-22; col. 7, lines 11-32; col. 8, lines 21-46); and create a candidate list of reference links based on the active link set update message and the active link set list (col. 12, lines 8-52; col. 11, lines 36-67; col. 13, lines 20-66; col. 14, lines 8-62).

However, Beasley et al does not specifically disclose the features of an asynchronous wireless communication system that employs reference links for synchronizing with a base station.

On the other hand, Hagting et al, from the same field of endeavor, discloses the features of an asynchronous wireless communication system that employs reference links for synchronizing with a base station (fig. 1, figs. 4-6; col. 8, lines 41-67; col. 9, lines 1-51; col. 9, line 58-col. 10, line 57) .

Hagting et al discloses a method for improving handover of a call or roaming in an asynchronously operating radio environment. Hagting et al shows in figure 4a, a radio communication unit that comprises a timing reference which is synchronized or locked to the

radio access unit. Furthermore, the radio communication unit has to perform an inter-cell handover of the call from the first radio access unit to the second radio access unit (figs. 4a-4c; col. 9, line 58-col. 10, line 57; col. 4, line 43-col. 5, line 6). In addition, asynchronous radio links can be detected by using a scan window. The timing reference of a radio communication unit can be adjusted to the common system timing retrieved via the SYNC word. Synchronization should be performed with respect to the strongest radio access unit (figs. 5-6, fig. 1; col. 8, lines 41-67; col. 9, lines 1-51). It is clearly stated that Hagting is directed to an asynchronous wireless communication system that employs reference links for synchronizing with a base station (see figs. 5-6; fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Hagting to the communication system of Beasley in order to provide a scanning method for initiating handover of a call in a radio communication system.

#### Allowable Subject Matter

3. Claims 12-13, 18-19, 20-21, 24-25, 6-8 are allowed.

#### Response to Arguments

4. Applicant's arguments with respect to claims 1-4, 9-11, 14-16, 22-23 have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marceau Milord whose telephone number is 571-272-7853. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban can be reached on 571-272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. M./

Primary Examiner, Art Unit 2618

/Marceau Milord/

Primary Examiner, Art Unit 2618